

WHAT IS CLAIMED IS:

1. An image processing device for selecting an image and transferring the selected image to an image output section that outputs the  
5 selected image according to image data generated by an image generating device and image generation record information associated with the image data, the image generation record information including at least operation information of the image generating device at the time that the image data is generated, the image processing device comprising:  
10           an analyzer for analyzing at least either one of the image data and the image generation record information associated with the image data to determine an image quality parameter relating to quality of an image represented by the image data; and  
            a selector for performing, on the basis of the image quality  
15 parameter, an output target decision regarding whether to select the image data as an output target.
2. An image processing device according to claim 1 wherein the analyzer analyzes both the image data and the image generation record  
20 information to determine the image quality parameter.
3. An image processing device according to claim 2 wherein the analyzer determines the image quality parameter using a weight distribution that is determined according to the image generation record  
25 information.
4. An image processing device according to claim 1 wherein the analyzer uses only the image generation record information to determine the quality characteristic parameter.
- 30 5. An image processing device according to claim 1 wherein

the analyzer determines a first characteristic value of the quality characteristic parameter that indicates a characteristic relating to sharpness of the image, and

the selector performs the output target decision on the basis of the  
5 first characteristic value.

6. An image processing device according to claim 5 wherein the analyzer calculates edge amount at each pixel position in the image, and determines the first characteristic value using the edge amount.

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7. An image processing device according to claim 5 wherein the image generation record information includes subject location information for the image, and

the analyzer determines the first characteristic value using the  
15 subject location information.

8. An image processing device according to claim 1 wherein the analyzer determines a second characteristic value of the quality characteristic parameter that indicates a characteristic relating to  
20 brightness of the image, and

the selector performs the output target decision on the basis of the second characteristic value.

9. An image processing device according to claim 8 wherein the  
25 second characteristic value is related to a size of that area within in the image whose brightness value is maximum value or minimum value within a possible range.

10. An image processing device according to claim 1 wherein  
30 the analyzer determines a third characteristic value of the quality characteristic parameter that indicates a characteristic relating to camera

shake at the time of generation of the image data, and

the selector performs the output target decision on the basis of the third characteristic value.

5            11. An image processing device according to claim 9 wherein  
the image generation record information includes at least one of  
shutter speed information and exposure time information, and  
the analyzer determines the third characteristic value using the  
shutter speed information or the exposure time information.

10           12. An image processing device according to claim 9 wherein  
the image generation record information further includes lens  
focal length information, and  
the selector performs the output target decision on the basis of the  
15 lens focal length information.

13. An image processing device according to claim 1 wherein  
the selector allows an user to modify the output target decision.

20           14. An image processing device according to claim 13 wherein  
the selector displays selected ones of the image quality parameter  
values for supporting the user to modify the output target decision.

25           15. An image processing device according to claim 13 wherein  
the selector highlights an image area having a predetermined characteristic  
by executing a predetermined process exclusively on the image area, for  
supporting the user to modify the output target decision.

30           16. An image output device for outputting an image according to  
image data generated by an image generating device and image generation  
record information associated with the image data, the image generation

record information including at least operation information of the image generating device at the time that the image data is generated, the image output device comprises:

an analyzer for analyzing at least either one of the image data  
5 and the image generation record information associated with the image data to determine an image quality parameter relating to quality of an image represented by the image data;

a selector for performing, on the basis of the image quality parameter, an output target decision regarding whether to select the image  
10 data as an output target; and

an output section for outputting an image using the image data that has been selected as the output target by the selector.

17. A method of selecting an image and transferring the selected  
15 image to an image output section that outputs the selected image according to image data generated by an image generating device and image generation record information associated with the image data, the image generation record information including at least operation information of the image generating device at the time that the image data is generated,  
20 the method comprising the steps of:

(a) analyzing at least either one of the image data and the image generation record information associated with the image data to determine an image quality parameter relating to quality of an image represented by the image data; and

25 (b) performing, on the basis of the image quality parameter, an output target decision regarding whether to select the image data as an output target.

18. A method according to claim 17 wherein the step (a) includes  
30 analyzing both the image data and the image generation record information to determine the image quality parameter.

19. A method according to claim 18 wherein the step (a) includes determining the image quality parameter using a weight distribution that is determined according to the image generation record information.

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20. A method according to claim 17 wherein the step (a) uses only the image generation record information to determine the quality characteristic parameter.

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21. A method according to claim 17 wherein

the step (a) includes determining a first characteristic value of the quality characteristic parameter that indicates a characteristic relating to sharpness of the image, and

the step (b) includes performing the output target decision on the basis of the first characteristic value.

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22. A method according to claim 21 wherein the step (a) includes calculating edge amount at each pixel position in the image, and determining the first characteristic value using the edge amount.

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23. A method according to claim 21 wherein

the image generation record information includes subject location information for the image, and

the step (a) includes determining the first characteristic value using the subject location information.

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24. A method according to claim 17 wherein

the step (a) includes determining a second characteristic value of the quality characteristic parameter that indicates a characteristic relating to brightness of the image, and

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the step (b) includes performing the output target decision on the

basis of the second characteristic value.

25. A method according to claim 24 wherein the second  
characteristic value is related to a size of that area within in the image  
5 whose brightness value is maximum value or minimum value within a  
possible range.

26. A method according to claim 17 wherein  
the step (a) includes determining a third characteristic value of  
10 the quality characteristic parameter that indicates a characteristic relating  
to camera shake at the time of generation of the image data, and  
the step (b) includes performing the output target decision on the  
basis of the third characteristic value.

15 27. A method according to claim 26 wherein  
the image generation record information includes at least one of  
shutter speed information and exposure time information, and  
the step (a) includes determining the third characteristic value  
using the shutter speed information or the exposure time information.

20 28. A method according to claim 27 wherein  
the image generation record information further includes lens  
focal length information, and  
the step (b) includes performing the output target decision on the  
25 basis of the lens focal length information.

29. A method according to claim 17 wherein  
the step (b) includes allowing an user to modify the output target  
decision.

30 30. A method according to claim 29 wherein

the step (b) includes displaying selected ones of the image quality parameter values for supporting the user to modify the output target decision.

5           31. A method according to claim 29 wherein the step (b) includes highlighting an image area having a predetermined characteristic by executing a predetermined process exclusively on the image area, for supporting the user to modify the output target decision.

10           32. A method of outputting an image according to image data generated by an image generating device and image generation record information associated with the image data, the image generation record information including at least operation information of the image generating device at the time that the image data is generated, the method  
15 comprising the steps of:

(a) analyzing at least either one of the image data and the image generation record information associated with the image data to determine an image quality parameter relating to quality of an image represented by the image data;

20           (b) performing, on the basis of the image quality parameter, an output target decision regarding whether to select the image data as an output target; and

(c) outputting an image using the image data that has been selected as the output target by the selector.

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33. A computer program product comprising:

a computer readable medium; and

a computer program stored on the computer readable medium, the computer program including;

30           a first program for causing a computer to analyze at least either one of the image data and the image generation record information

associated with the image data to determine an image quality parameter relating to quality of an image represented by the image data; and

- a second program for causing the computer to perform, on the basis of the image quality parameter, an output target decision regarding
- 5 whether to select the image data as an output target.